Support Information for Cisco Switches

This chapter contains the Virtual Network Element (VNE) device support information in Cisco ANA 3.6 SP1 for the following devices:

- Cisco Catalyst 2900 Series Switches, page 141
- Cisco ME 3400 Series Ethernet Access Switches, page 144
- Cisco Catalyst 3500 XL Series Switches, page 146
- Cisco Catalyst 3550 Series Switches, page 148
- Cisco Catalyst 3560 Series Switches, page 150
- Cisco Catalyst 3750 Series Switches, page 153
- Cisco Catalyst 3750 Metro Series Switches, page 155
- Cisco Catalyst 4000 Series Switches, page 158
- Cisco Catalyst 4500 Series Switches, page 161
- Cisco ME 4900 Series Ethernet Access Switches, page 165
- Cisco Catalyst 6500 Series (IOS) Switches, page 167
- Cisco Catalyst 6500 Series (CatOS) Switches, page 175
- Cisco ME 6500 Series Ethernet Switches, page 180

For information about the technologies supported by each of these VNEs, see Supported Technologies on Cisco Switches, page 182.

Cisco Catalyst 2900 Series Switches

This section includes the following information about Cisco Catalyst 2900 Series switches:

- Cisco Catalyst 2900 Series—Supported Software Versions, page 142
- Cisco Catalyst 2900 Series—Supported Topologies, page 142
- Cisco Catalyst 2900 Series—Supported Modules, page 142
- Cisco Catalyst 2900 Series—Supported Technologies, page 143
- Cisco Catalyst 2900 Series—Supported Events, page 143

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 2900 Series—Supported Software Versions

Table 100 lists the supported software versions for Cisco Catalyst 2900 Series switches in Cisco ANA 3.6 SP1.

Table 100 Supported Software Versions for Cisco Catalyst 2900 Series Switches

Software Version	Certification Level
IOS 12.2(25)FX	S
12.0*	S
12.1*	S
CatOS 9.00.04	S
12.2*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 2900 Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 2900 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 2900 Series—Supported Modules

Table 101 lists the supported modules for Cisco Catalyst 2900 Series switches in Cisco ANA 3.6 SP1.

Table 101 Supported Modules for Cisco Catalyst 2900 Series Switches

Module Name	Module Description	Certification Level
WS-C2912-XL	12 fixed autosensing 10/100 ports	S
WS-C2924M-XL	24 fixed autosensing 10/100 ports 2 expansion slots	S

Table 101 Supported Modules for Cisco Catalyst 2900 Series Switches (continued)

Module Name	Module Description	Certification Level
WS-C2948G	48 10/100 ports and 2 fixed, gigabit interface converter (GBIC)-based 1000BASE-X uplink ports 1.5 RU switch Catalyst OS installed	S
WS-X2948	Switching Supervisor	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco Catalyst 2900 Series—Supported Technologies, page 143.

Cisco Catalyst 2900 Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 2900 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- STP, page 196

Cisco Catalyst 2900 Series—Supported Events

Table 102 lists the supported service events for Cisco Catalyst 2900 Series switches in Cisco ANA 3.6 SP1.

Table 102 Service Events for Cisco Catalyst 2900 Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Card up/down	Y

Cisco ME 3400 Series Ethernet Access Switches

This section includes the following information about Cisco ME 3400 Series switches:

- Cisco ME 3400 Series—Supported Software Versions, page 144
- Cisco ME 3400 Series—Supported Topologies, page 145
- Cisco ME 3400 Series—Supported Modules, page 145
- Cisco ME 3400 Series—Supported Technologies, page 145
- Cisco ME 3400 Series—Supported Events, page 146

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco ME 3400 Series—Supported Software Versions

Table 103 lists the supported software versions for Cisco ME 3400 Series switches in Cisco ANA 3.6 SP1.

Table 103 Supported Software Versions for Cisco ME 3400 Series Switches

Software Version	Certification Level
12.3(23)S1	S
12.3(22)S	S
12.3(23)	S
12.3(23)S2	S
12.3(23)S3	S
12.2(25)SEG	S
12.2(35)SE1	S
12.2(35)SE	S
12.2(35)SE3	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco ME 3400 Series—Supported Topologies

The following topologies are supported for Cisco ME 3400 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco ME 3400 Series—Supported Modules

Table 104 lists the supported modules for Cisco ME 3400 Series switches in Cisco ANA 3.6 SP1.

Table 104 Supported Modules for Cisco ME 3400 Series Switches

Module Name	Module Description	Certification Level
ME-3400G-12CS-A	12 dual-purpose ports (10/100/1000 and Small Form-Factor Pluggable [SFP]) and 4 SFP uplinks	V
ME-3400G-12CS-DC	12 dual-purpose ports (10/100/1000 and SFP) and 4 SFP uplinks	S
ME-3400G-2CS	2 dual-purpose ports (10/100/1000 and SFP) and 2 SFP uplinks	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco ME 3400 Series—Supported Technologies, page 145.

Cisco ME 3400 Series—Supported Technologies

The following technologies are supported by the Cisco ME 3400 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- Q-in-Q (Switch Port), page 195
- STP, page 196

Cisco ME 3400 Series—Supported Events

Table 105 lists the supported service events for Cisco ME 3400 Series switches in Cisco ANA 3.6 SP1.

Table 105 Service Events for Cisco ME 3400 Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
Card up/down	Y

Cisco Catalyst 3500 XL Series Switches

This section includes the following information about Cisco Catalyst 3500 XL Series switches:

- Cisco Catalyst 3500 XL Series—Supported Software Versions, page 147
- Cisco Catalyst 3500 XL Series—Supported Topologies, page 147
- Cisco Catalyst 3500 XL Series—Supported Technologies, page 147
- Cisco Catalyst 3500 XL Series—Supported Events, page 148

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 3500 XL Series—Supported Software Versions

Table 106 lists the supported software versions for Cisco Catalyst 3500 XL Series switches in Cisco ANA 3.6 SP1.

Table 106 Supported Software Versions for Cisco Catalyst 3500 XL Series Switches

Software Version	Certification Level
12.1*	S
12.0*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 3500 XL Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 3500 XL Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 3500 XL Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 3500 XL Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188

Cisco Catalyst 3500 XL Series—Supported Events

Table 107 lists the supported service events for Cisco Catalyst 3500 XL Series switches in Cisco ANA 3.6 SP1.

Table 107 Service Events for Cisco Catalyst 3500 XL Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
VPN leak	N
Card up/down	Y

Cisco Catalyst 3550 Series Switches

This section includes the following information about Cisco Catalyst 3550 Series switches:

- Cisco Catalyst 3550 Series—Supported Software Versions, page 149
- Cisco Catalyst 3550 Series—Supported Topologies, page 149
- Cisco Catalyst 3550 Series—Supported Technologies, page 149
- Cisco Catalyst 3550 Series—Supported Events, page 150

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 3550 Series—Supported Software Versions

Table 108 lists the supported software versions for Cisco Catalyst 3550 Series switches in Cisco ANA 3.6 SP1.

Table 108 Supported Software Versions for Cisco Catalyst 3550 Series Switches

Software Version	Certification Level
12.1(11)EA*	S
12.1(12c)EA1	S
12.1(13)EA*	S
12.1(14)AX3	S
12.1(14)EA1	S
12.1(19)EA*	S
12.1(20)EA*	S
12.1(22)EA*	S
12.1(22)EA6	S
12.1(22)EA8a	V
12.2*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 3550 Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 3550 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 3550 Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 3550 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188

- Q-in-Q (Switch Port), page 195
- STP, page 196

Cisco Catalyst 3550 Series—Supported Events

Table 109 lists the supported service events for Cisco Catalyst 3550 Series switches in Cisco ANA 3.6 SP1.

Table 109 Service Events for Cisco Catalyst 3550 Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Cloud Problem	N
Card up/down	Y

Cisco Catalyst 3560 Series Switches

This section includes the following information about Cisco Catalyst 3560 Series switches:

- Cisco Catalyst 3560 Series—Supported Software Versions, page 151
- Cisco Catalyst 3560 Series—Supported Topologies, page 151
- Cisco Catalyst 3560 Series—Supported Modules, page 152
- Cisco Catalyst 3560 Series—Supported Technologies, page 152
- Cisco Catalyst 3560 Series—Supported Events, page 153

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 3560 Series—Supported Software Versions

Table 110 lists the supported software versions for Cisco Catalyst 3560 Series switches in Cisco ANA 3.6 SP1.

Table 110 Supported Software Versions for Cisco Catalyst 3560 Series Switches

Software Version	Certification Level
12.1(13)EA1a	S
12.1(14)EA1a	S
12.1(25)EW	S
12.1(6)EA1a	S
12.2(25)SED	S
12.1(22)EA5	S
12.1(22)EA8a	S
12.2(25)SEE2	S
12.0(0)ST*	S
12.0*	S
12.1*	S
12.2*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 3560 Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 3560 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 3560 Series—Supported Modules

Table 111 lists the supported modules for Cisco Catalyst 3560 Series switches in Cisco ANA 3.6 SP1.

Table 111 Supported Modules for Cisco Catalyst 3560 Series Switches

Module Name	Module Description	Certification Level
WS-C3560-24PS	24 Ethernet 10/100 ports and 2 SFP-based Gigabit Ethernet ports	S
WS-C3560-48PS	48 Ethernet 10/100 ports and 4 SFP-based Gigabit Ethernet ports	S
WS-C3560G-24PS	24 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	S
WS-C3560G-24TS	24 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	S
WS-C3560G-48TS	48 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	S
WS-C3560G-48PS	48 Ethernet 10/100/1000 ports and 4 SFP-based Gigabit Ethernet ports	S
WS-C3560-24PS	24 Ethernet 10/100 ports and 2 SFP-based Gigabit Ethernet ports	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco Catalyst 3560 Series—Supported Technologies, page 152.

Cisco Catalyst 3560 Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 3560 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- Q-in-Q (Switch Port), page 195
- Q-in-Q (Routed Switch), page 195
- STP, page 196

Cisco Catalyst 3560 Series—Supported Events

Table 112 lists the supported service events for Cisco Catalyst 3560 Series switches in Cisco ANA 3.6 SP1.

Table 112 Service Events for Cisco Catalyst 3560 Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
VPN leak	N
Cloud Problem	N
Card up/down	Y

Cisco Catalyst 3750 Series Switches

This section includes the following information about Cisco Catalyst 3750 Series switches:

- Cisco Catalyst 3750 Series—Supported Software Versions, page 154
- Cisco Catalyst 3750 Series—Supported Topologies, page 154
- Cisco Catalyst 3750 Series—Supported Technologies, page 154
- Cisco Catalyst 3750 Series—Supported Events, page 155

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 3750 Series—Supported Software Versions

Table 113 lists the supported software versions for Cisco Catalyst 3750 Series switches in Cisco ANA 3.6 SP1.

Table 113 Supported Software Versions for Cisco Catalyst 3750 Series Switches

Software Version	Certification Level
IOS 12.2(25)EY3	S
IOS 12.1*	S
IOS 12.2*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 3750 Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 3750 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 3750 Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 3750 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- Q-in-Q (Switch Port), page 195
- Q-in-Q (Routed Switch), page 195

Cisco Catalyst 3750 Series—Supported Events

Table 114 lists the supported service events for Cisco Catalyst 3750 Series switches in Cisco ANA 3.6 SP1.

Table 114 Service Events for Cisco Catalyst 3750 Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
Card up/down	Y

Cisco Catalyst 3750 Metro Series Switches

This section includes the following information about Cisco Catalyst 3750 Metro Series switches:

- Cisco Catalyst 3750 Metro Series—Supported Software Versions, page 156
- Cisco Catalyst 3750 Metro Series—Supported Topologies, page 156
- Cisco Catalyst 3750 Metro Series—Supported Modules, page 156
- Cisco Catalyst 3750 Metro Series—Supported Technologies, page 157
- Cisco Catalyst 3750 Metro Series—Supported Events, page 157

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 3750 Metro Series—Supported Software Versions

Table 115 lists the supported software versions for Cisco Catalyst 3750 Metro Series switches in Cisco ANA 3.6 SP1.

Table 115 Supported Software Versions for Cisco Catalyst 3750 Metro Series Switches

Software Version	Certification Level
IOS 12.2(25)EY3	S
IOS 12.1(14)AX*	S
IOS 12.2(25)*	S
IOS 12.2(35)*	S
IOS 12.2(37)*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 3750 Metro Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 3750 Metro Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 3750 Metro Series—Supported Modules

Table 116 lists the supported modules for Cisco Catalyst 3750 Metro Series switches in Cisco ANA 3.6 SP1.

Table 116 Supported Modules for Cisco Catalyst 3750 Metro Series Switches

Module Name	Module Description	Certification Level
catalyst375024ME	Metro Ethernet Catalyst 3750 Module. 24-10/100 + 2 SFP (Small Formfactor Pluggable) ports for downlinks	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco Catalyst 3750 Metro Series—Supported Technologies, page 157.

Cisco Catalyst 3750 Metro Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 3750 Metro Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Routing Protocols, page 186
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- MPLS, page 191
- VPN, page 193
- Q-in-Q (Switch Port), page 195
- Q-in-Q (Routed Switch), page 195
- STP, page 196

Cisco Catalyst 3750 Metro Series—Supported Events

Table 117 lists the supported service events for Cisco Catalyst 3750 Metro Series switches in Cisco ANA 3.6 SP1.

Table 117 Service Events for Cisco Catalyst 3750 Metro Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
BGP Neighbor Down	Y
Card up/down	Y

Cisco Catalyst 4000 Series Switches

This section includes the following information about Cisco Catalyst 4000 Series switches:

- Cisco Catalyst 4000 Series—Supported Software Versions, page 158
- Cisco Catalyst 4000 Series—Supported Topologies, page 158
- Cisco Catalyst 4000 Series—Supported Modules, page 159
- Cisco Catalyst 4000 Series—Supported Technologies, page 160
- Cisco Catalyst 4000 Series—Supported Service Events, page 161

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 4000 Series—Supported Software Versions

Table 118 lists the supported software versions for Cisco Catalyst 4000 Series switches in Cisco ANA 3.6 SP1.

Table 118 Supported Software Versions for Cisco Catalyst 4000 Series Switches

Software Version	Certification Level
IOS 12.1(12c)EW1	S
IOS 12.2(20)EWA1	S
IOS 12.2(25)SG	S
IOS 12.2*	S
IOS 12.1*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 4000 Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 4000 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 4000 Series—Supported Modules

Table 119 lists the supported modules for Cisco Catalyst 4000 Series switches in Cisco ANA 3.6 SP1.

Table 119 Supported Modules for Cisco Catalyst 4000 Series Switches

Module Name	Module Description	Certification Level
WS-X4124-FX-MT	FE Switching Module, 24-port 100FX (MTRJ)	S
WS-X4148-FX-MT	FE Switching Module, 48-100FX MMF (MTRJ)	S
WS-X4148-RJ	10/100 Fast Ethernet Module, 48 Ports (RJ-45)	S
WS-X4148-RJ21	Telco switch module, 48-port 10/100 (4xRJ21)	S
WS-X4148-RJ45V	Inline Power 10/100, 48-port (RJ45)	S
WS-X4232-GB-RJ	E/FE/GE Module, 2-GE (GBIC), 32-10/100 FE (RJ-45)	S
WS-X4232-RJ-XX	FE Base Module, 32-10/100(RJ45)+ Modular Uplink slot	S
WS-X4232-L3	E/FE/GE L3 Module, 2-GE(GBIC), 32-10/100 (RJ45)	S
WS-X4306-GB	Gigabit Ethernet Module, 6 Ports (GBIC)	S
WS-X4412-2GB-T	GE Module, 12-1000T (RJ45)+2-1000X (GBIC Slot)	S
WS-X4424-GB-RJ-45	24 port 10/100/1000 Auto-Sensing Module (RJ45)	S
WS-X4448-GB-RJ45	48 port 10/100/1000 Auto-Sensing Module (RJ45)	S
WS-X4418-GB	GE Module, Server Switching 18 Ports (GBIC)	S
WS-U4504-FX-MT	FE Uplink Daughter Card, 4-port 100FX (MTRJ)	S
WS-X4014	Catalyst 4006 Supervisor 3, Spare	S
WS-X4302-GB	2-port 1000BASE-X (GBIC) Gigabit Ethernet	S
WS-X4424-GB-RJ45	24-port 10/100/1000BASE-T Gigabit Ethernet switching module	S
WS-X4448-GB-LX	48-port 1000BASE-LX (SFP included) Gigabit Ethernet switching module	S
WS-X4248-RJ45V	48-port PoE 10/100BASE-TX switching module	S
WS-X4248-RJ21V	48-port PoE 10/100 BASE-TX switching module	S
WS-X4548-GB-RJ45V	48-port PoE 10/100/1000BASE-T switching module	S
WS-X4548-GB-RJ45	48-port Gigabit Ethernet 10/100/1000BASE-T switching module	S
CWDM-SFP-1470	CWDM SFP 1470 nm, Gigabit Ethernet and 1G/2G FC	S

Table 119 Supported Modules for Cisco Catalyst 4000 Series Switches (continued)

Module Name	Module Description	Certification Level
CWDM-SFP-1490	CWDM SFP 1490 nm, Gigabit Ethernet and 1G/2G FC	S
CWDM-SFP-1510	CWDM SFP 1510 nm, Gigabit Ethernet and 1G/2G FC	S
CWDM-SFP-1530	CWDM SFP 1530 nm, Gigabit Ethernet and 1G/2G FC	S
CWDM-SFP-1550	CWDM SFP 1550 nm, Gigabit Ethernet and 1G/2G FC	S
CWDM-SFP-1570	CWDM SFP 1570 nm, Gigabit Ethernet and 1G/2G FC	S
CWDM-SFP-1590	CWDM SFP 1590 nm, Gigabit Ethernet and 1G/2G FC	S
CWDM-SFP-1610	CWDM SFP 1610 nm, Gigabit Ethernet and 1G/2G FC	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco Catalyst 4000 Series—Supported Technologies, page 160.

Cisco Catalyst 4000 Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 4000 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- STP, page 196

Cisco Catalyst 4000 Series—Supported Service Events

Table 120 lists the supported service events (also called service alarms) for Cisco Catalyst 4000 Series switches in Cisco ANA 3.6 SP1.

Table 120 Service Events for Cisco Catalyst 4000 Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Card up/down	Y

Cisco Catalyst 4500 Series Switches

This section includes the following information about Cisco Catalyst 4500 Series switches:

- Cisco Catalyst 4500 Series—Supported Software Versions, page 162
- Cisco Catalyst 4500 Series—Supported Topologies, page 162
- Cisco Catalyst 4500 Series—Supported Modules, page 162
- Cisco Catalyst 4500 Series—Supported Technologies, page 164
- Cisco Catalyst 4500 Series—Supported Events, page 165

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 4500 Series—Supported Software Versions

Table 121 lists the supported software versions for Cisco Catalyst 4500 Series switches in Cisco ANA 3.6 SP1.

Table 121 Supported Software Versions for Cisco Catalyst 4500 Series Switches

Software Version	Certification Level
IOS 12.1(12c)EW1	V
IOS 12.2(20)EWA1	V
IOS 12.2(25)SG	V
IOS 12.2*	S
IOS 12.1*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 4500 Series—Supported Topologies

The following topologies are supported for Cisco Catalyst 4500 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco Catalyst 4500 Series—Supported Modules

Table 122 lists the supported modules for Cisco Catalyst 4500 Series switches in Cisco ANA 3.6 SP1.

Table 122 Supported Modules for Cisco Catalyst 4500 Series Switches

Module Name	Module Description	Certification Level
WS-X4013+	Catalyst 4500 Supervisor II-Plus (IOS), 2GE,Console(RJ-45)	S
WS-X4013+TS	Catalyst 4503 SupII-Plus-TS, 12 10/100/1000 PoE+8 SFP slots	S
WS-X4014	Supervisor Engine III	S
WS-X4515	Catalyst 4500 Supervisor IV (2 GE),Console(RJ-45)	S
WS-X4516	Catalyst 4500 Supervisor V (2 GE),Console(RJ-45)	S

Table 122 Supported Modules for Cisco Catalyst 4500 Series Switches (continued)

Module Name	Module Description	Certification Level
WS-X4516-10GE	Catalyst 4500 Supervisor V-10GE, 2x10GE (X2) and 4x1GE (SFP)	S
WS-X4124-FX-MT	24-Port 100BASE-FX Fast Ethernet Switching Module	S
WS-X4148-FX-MT	Catalyst 4500 FE Switching Module, 48-100FX MMF(MTRJ)	S
WS-X4148-RJ	Catalyst 4500 10/100 Auto Module, 48-Ports (RJ-45)	S
WS-X4148-RJ21	Catalyst 4500 10/100 Module, 48-Ports Telco (4xRJ21)	S
WS-X4148-RJ45V	10/100BASE-TX Fast Ethernet switching module with Cisco pre-standard PoE	S
WS-X4248-FE-SFP	Catalyst 4500 48-Port 100BASE-X (SFPs Optional)	S
WS-X4224-RJ45V	Catalyst 4500 10/100 PoE 802.3af 24-ports (RJ45)	S
WS-X4248-RJ21V	Catalyst 4500 PoE 802.3af 10/100, 48-Ports (RJ21)	S
WS-X4248-RJ45V	Catalyst 4500 PoE 802.3af 10/100, 48-Ports (RJ45)	S
WS-X4232-GB-RJ	Catalyst 4500 32-10/100 (RJ-45),2-GE(GBIC)	S
WS-X4232-RJ-XX	Catalyst 4500 10/100 Module,32-ports(RJ45)+Modular uplinks	S
WS-U4504-FX-MT	Catalyst 4500 4-port 100FX(MTRJ) Uplink for WS-X4232-RJ-XX	S
WS-X4302-GB	Catalyst 4500 Gigabit Ethernet Module, 2-Ports (GBIC)	S
WS-X4306-GB	Catalyst 4500 Gigabit Ethernet Module, 6-Ports (GBIC)	S
WS-X4506-GB-T	Catalyst 4500 6-Port 10/100/1000 PoE or SFP (Optional)	S
WS-X4412-2GB-T	1000BASE-T plus 1000BASE-X Gigabit Ethernet switching module	S
WS-X4418-GB	Catalyst 4500 GE Module, Server Switching 18-Ports (GBIC)	S
WS-X4424-GB-RJ45	Catalyst 4500 24-port 10/100/1000 Module (RJ45)	S
WS-X4448-GB-LX	1000BASE-X Gigabit Ethernet switching module	S
WS-X4448-GB-RJ45	Catalyst 4500 48-Port 10/100/1000 Module (RJ45)	S

Table 122 Supported Modules for Cisco Catalyst 4500 Series Switches (continued)

Module Name	Module Description	Certification Level
WS-X4524-GB-RJ45V	Catalyst 4500 PoE 802.3af 10/ 100/1000 24-ports (RJ45)	S
WS-X4548-GB-RJ45	Catalyst 4500 Enhanced 48-Port 10/100/1000 Base-T (RJ-45)	S
WS-X4448-GB-SFP	Catalyst 4500 48-Port 1000Base-X (SFPs Optional)	S
WS-X4548-GB-RJ45V	Catalyst 4500 PoE 802.3af 10/100/1000, 48-Ports (RJ45)	S
WS-X4604-GWY	Catalyst 4000 Access Gateway Module	S
WS-X4232-L3	Layer 3 Services Module	S
WS-X4148-FE-BD-LC	48-Port 100BASE-BX10-D Fast Ethernet Switching Module	S
WS-X4148-FE-LX-MT	48-Port 100Base-LX-MT Fast Ethernet Switching Module	S
WS-X4124-RJ45	24-Port 10/100BASE-TX Fast Ethernet Switching Module	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco Catalyst 4500 Series—Supported Technologies, page 164.

Cisco Catalyst 4500 Series—Supported Technologies

The following technologies are supported by the Cisco Catalyst 4500 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- STP, page 196

Cisco Catalyst 4500 Series—Supported Events

Table 123 lists the supported service events for Cisco Catalyst 4500 Series switches in Cisco ANA 3.6 SP1.

Table 123 Service Events for Cisco Catalyst 4500 Series Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Card up/down	Y

Cisco ME 4900 Series Ethernet Access Switches

This section includes the following information about Cisco ME 4900 Series switches:

- Cisco ME 4900 Series—Supported Software Versions, page 166
- Cisco ME 4900 Series—Supported Topologies, page 166
- Cisco ME 4900 Series—Supported Technologies, page 166
- Cisco ME 4900 Series—Supported Events, page 167

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco ME 4900 Series—Supported Software Versions

Table 124 lists the supported software versions for Cisco ME 4900 Series switches in Cisco ANA 3.6 SP1.

Table 124 Supported Software Versions for Cisco ME 4900 Series Switches

Software Version	Certification Level
IOS 12.2(31)SG	S
IOS 12.2(31)SGA	S
IOS 12.2(31)SGA1	S
IOS 12.2*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco ME 4900 Series—Supported Topologies

The following topologies are supported for Cisco ME 4900 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP

Cisco ME 4900 Series—Supported Technologies

The following technologies are supported by the Cisco ME 4900 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Q-in-Q (Switch Port), page 195
- STP, page 196

Cisco ME 4900 Series—Supported Events

Table 125 lists the supported service events for Cisco ME 4900 Series switches in Cisco ANA 3.6 SP1.

Table 125 Service Events for Cisco ME 4900 Series Switches

Event Name	Expedited
All ip interfaces down active ip interfaces found	Y
interface status down/up	Y
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
Cloud Problem	N
Layer 2 Tunnel Down	N
Card up/down	Y

Cisco Catalyst 6500 Series (IOS) Switches

This section includes the following information about Cisco Catalyst 6500 Series (IOS) switches:

- Cisco Catalyst 6500 Series (IOS)—Supported Software Versions, page 168
- Cisco Catalyst 6500 Series (IOS)—Supported Topologies, page 168
- Cisco Catalyst 6500 Series (IOS)—Supported Modules, page 169
- Cisco Catalyst 6500 Series (IOS)—Supported Technologies, page 173
- Cisco Catalyst 6500 Series (IOS)—Supported Events, page 174

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 6500 Series (IOS)—Supported Software Versions

Table 126 lists the supported software versions for Cisco Catalyst 6500 Series (IOS) switches in Cisco ANA 3.6 SP1.

Table 126 Supported Software Versions for Cisco Catalyst 6500 Series (IOS) Switches

Software Version	Certification Level
IOS 12.1(20)E3	S
IOS 12.2(18)SXD	V
IOS 12.2(18)SXD2	S
IOS 12.2(18)SXD5	V
IOS 12.2(18)SXE6b	V
IOS 12.2(33)SRA	V
IOS 12.2(33)SRA2	V
IOS 12.2(33)SRB	V
IOS 12.2(18)SXE*	S
IOS 12.2(18)SXF*	S
IOS 12.2(33*	S
IOS 12.3*	S
IOS 12.4*	S
IOS 12.1(13)E6	S
IOS 12.2(18)SXE	S
IOS 12.2(33)SRB1	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco Catalyst 6500 Series (IOS)—Supported Topologies

The following topologies are supported for Cisco Catalyst 6500 Series (IOS) switches in Cisco ANA 3.6 SP1:

- IP
- MAC
- CDP
- MPLS

Cisco Catalyst 6500 Series (IOS)—Supported Modules

Table 127 lists the supported modules for Cisco Catalyst 6500 Series (IOS) switches in Cisco ANA 3.6 SP1.

Table 127 Supported Modules for Cisco Catalyst 6500 Series (IOS) Switches

Module Name	Module Description	Certification Level
7600-ES20-PROC	7600 ES20 PROC FRU	S
7600-MSFC4	c7600 MSFC4 Daughterboard	S
7600-SIP-200	SPA Interface Processor-200	S
7600-SIP-400	SPA Interface Processor-400	S
7600-SIP-600	SPA Interface Processor-600	S
OSM-12CT3T1	12-port channelized/unchannelized CT3-T1	S
OSM-1CHOC12T3-SI	1-port channelized OC-12, SM-IR	S
OSM-1OC48-POS-SL	Enhanced 1-port OC-48/STM-16 SONET/SDH OSM, SM-LR	S
OSM-1OC48-POS-SS	Enhanced 1-port OC-48/STM-16 SONET/SDH OSM, SM-SR	S
OSM-2+4GE-WAN	4-port Gigabit Ethernet WAN (GBIC) with two Layer 2 LAN ports; CEF256	S
OSM-2OC12-ATM-MM	Enhanced 2-port OC-12/STM-4 ATM OSM, MM	S
OSM-2OC12-ATM-SI	Enhanced 2-port OC-12/STM-4 ATM OSM, SM-IR	S
OSM-4OC12-POS-SI	Enhanced 4-port OC-12c/STM-4c POS, SM-IR; CEF256	S
OSM-4OC3-POS-SI	Enhanced 4-port OC-3c/STM-1c POS, SM-IR;	S
PA-1FE-TX	1-port Fast Ethernet port adapter	S
PA-2FE-TX	2-port Fast Ethernet port adapter	S
PA-4T	T1/E1 port adapters	S
PA-A3-E3	ATM with traffic shaping port adapters	S
PA-A3-T3	ATM with traffic shaping port adapters	S
PA-MC-4T1	T1/E1 port adapters	S
PA-MC-8T1	T1/E1 port adapters	S
PA-MC-STM-1	Multichannel STM-1 port adapters	S
PA-POS-2OC3	2-port POS OC3c/STM1 port adapter	S
SFP-OC3-IR1	Intermediate range, single-mode fiber	S
SFP-OC3-LR1	Long range, single-mode fiber	S
SFP-OC3-MM	Short range, multimode fiber	S
SPA-10X1GE	10-port Gigabit Ethernet SPA, SFP Optics	S

Table 127 Supported Modules for Cisco Catalyst 6500 Series (IOS) Switches (continued)

Module Name	Module Description	Certification Level
SPA-10X1GE-V2	10-port Gigabit Ethernet SPA, SFP Optics	S
SPA-1XCHSTM1/OC3	1-port Channelized STM1/OC3 to DS0 SPA	S
SPA-1XOC12-ATM	1-Port OC-12c/STM-4c ATM SPA	S
SPA-1XOC12-POS	1-port OC-12c/STM-4c POS SPA	S
SPA-1XOC48-ATM	1 port OC-48c/STM-16 ATM SPA	S
SPA-1XTENGE-XFP	1-port 10 Gigabit Ethernet SPA, LANPHY XFP Optics	S
SPA-24CHT1-CE-ATM	24-Port Channelized T1/E1/J1 ATM CEoP SPA	S
SPA-2X1GE	2-port Gigabit Ethernet SPA, SFP Optics	S
SPA-2X1GE-V2	2-port Gigabit Ethernet SPA, SFP Optics	S
SPA-2XCT3/DS0	2-port Channelized T3 to DS0 SPA	S
SPA-2XOC3-ATM	2-port OC-3c/STM-1c ATM SPA	S
SPA-2XOC3-POS	2-port OC-3c/STM-1c POS SPA	S
SPA-2XOC48POS/RPR	1-port 10 Gigabit Ethernet Shared Port Adapter XFP based	S
SPA-2XOC48POSRPR	2 port OC-48 POS/RPR SPA with SFP Optics	S
SPA-2XT3/E3	2-port Clear Channel T3/E3 SPA	S
SPA-4X1FE-TX-V2	4-port 10/100 Ethernet SPA TX	S
SPA-4XCT3/DS0	4-port Channelized T3 to DS0 SPA	S
SPA-4XOC3-ATM	4-port OC-3c/STM-1c ATM SPA	S
SPA-4XOC3-POS	4-port OC-3c/STM-1c POS SPA	S
SPA-4XOC48POSRPR	4-port OC-48c/STM-16 POS/DPT/RPR SPA	S
SPA-4XT3/E3	4-port Clear Channel T3/E3 SPA	S
SPA-5X1GE	5-port Gigabit Ethernet SPA, SFP Optics	S
SPA-8X1FE-TX-V2	8-port 10/100 Ethernet SPA TX	S
SPA-8XCHT1E1	8-Port Channelized T1/E1 SPA	S
SPA-OC192POS-LR	1-port OC-192c/STM-64 POS/RPR SPA, SM-LR	S
SPA-OC192POS-XFP	1-port OC-192c/STM-64 POS/RPR SPA, XFP Optics	S
WS-6700-DFC3B	Catalyst 6500 Distributed forwarding card 3B	S
WS-6700-DFC3BXL	Catalyst 6500 Distributed forwarding card 3B XL	S
WS-C6509-E-FAN	High-capacity fan tray	S
WS-C6509-NEB-A	Enhanced 9-slot vertically oriented chassis	S
WS-CAC-6000W	6000W AC power supply	S

Table 127 Supported Modules for Cisco Catalyst 6500 Series (IOS) Switches (continued)

Module Name	Module Description	Certification Level
WS-F6700-DFC3BXL	Distributed Forwarding Card 3BXL (DFC3BXL) for use on CEF720 modules	S
WS-F6700-DFC3C	Distributed Forwarding Card 3C (DFC3C) for use on CEF720 modules	S
WS-F6700-DFC3CXL	Distributed Forwarding Card 3CXL (DFC3CXL) for use on CEF720 modules	S
WS-F6K-FE48X2-AF	IEEE 802.3af PoE daughtercard	S
WS-F6K-GE48-AF	IEEE 802.3af PoE daughtercard	S
WS-F6K-MSFC2	Multilevel Switching Feature Card Version 2 for Catalyst 6000 that is treated as a standalone system by the NMS	S
WS-F6K-PFC2	Catalyst 6500 L3 switching engine II	S
WS-F6K-PFC3BXL	Policy Feature Card 3BXL (PFC3BXL)	V
WS-F6K-PFC3CXL	Policy Feature Card 3CXL (PFC3CXL)	S
WS-F6K-VPWR	PoE Daughtercard	S
WS-F6K-VPWR-GE	PoE Daughtercard	S
WS-G6483	10GBASE-ER serial 1550 nm extended-reach OIM	S
WS-G6488	10GBASE-LR serial 1310 nm long-reach OIM	S
WS-SUP32-10GE-3B	Supervisor Engine 32	S
WS-SUP32-GE-3B	Supervisor Engine 32	S
WS-SUP720-3B	Supervisor Engine 720 with PFC3B	V
WS-SUP720-3BXL	Supervisor Engine 720 with PFC3BXL	V
WS-SVC-IDS2-BUN-K9	Cisco Catalyst 6500 Series Intrusion Detection System (IDSM-2) Service Module	S
WS-SVC-MWAM-1	Multi-Processor WAN Application Module	S
WS-SVC-NAM-1	Network Analysis module 1	S
WS-SVC-NAM-2	Network Analysis module 2	S
WS-X6148A-GE-TX	48 port 10/100/1000 RJ-45 Ethernet Switching Module	S
WS-X6148A-RJ-45	48 port 10/100TX RJ-45 Ethernet/Fast Ethernet Switching Module	S
WS-X6148-FE-SFP	48 port 100BASE-FX Fast Ethernet Switching Module	S
WS-X6148-GE-TX	48 port 10/100/1000 RJ-45 Ethernet Switching Module	S
WS-X6148-RJ-21	48 port 10/100TX RJ-21 Ethernet/Fast Ethernet Switching Module	S

Table 127 Supported Modules for Cisco Catalyst 6500 Series (IOS) Switches (continued)

Module Name	Module Description	Certification Level
WS-X6148-RJ-45	48 port 10/100TX RJ-45 Ethernet/Fast Ethernet Switching Module	S
WS-X6148X2-RJ-45	96 port 10/100TX RJ-45 Ethernet/Fast Ethernet Switching Module	S
WS-X6196-RJ-21	96 port 10/100TX RJ-21 Ethernet/Fast Ethernet Switching Module	S
WS-X6248A-TEL	48 port 10/100TX RJ-21 Enhanced Ethernet/Fast Ethernet Switching Module	S
WS-X6248-RJ-45	48 port 10/100TX RJ-45 Ethernet/Fast Ethernet Switching Module	S
WS-X6248-TEL	48 port 10/100TX RJ-21 Ethernet/Fast Ethernet Switching Module	S
WS-X6316-GE-TX	16-port Gigabit Ethernet RJ-45	S
WS-X6324-100FX-SM	24 port 100FX SingleMode Fast Ethernet Switching Module	S
WS-X6348-RJ-21	6500 48 port 10/100BaseTX (RJ-21)	S
WS-X6348-RJ-45	48 port 10/100TX RJ-45 Ethernet/Fast Ethernet Switching Module	S
WS-X6408A-GBIC	8-port Gigabit Ethernet GBIC Enhanced QoS Module	S
WS-X6408-GBIC	8-port Gigabit Ethernet GBIC	S
WS-X6416-GBIC	16-port Gigabit Ethernet GBIC	S
WS-X6502-10GE	1-port 10-Gigabit Ethernet	S
WS-X6516A-GBIC	16-port Gigabit Ethernet GBIC	S
WS-X6516-GBIC	16-port Gigabit Ethernet GBIC	S
WS-X6516-GE-TX	16 port 10/100/1000 Base-T Ethernet Switching Module	S
WS-X6548-GE-TX	48 port 10/100/1000 RJ-45 Ethernet Switching Module	S
WS-X6548-RJ-21	48 port 10/100TX RJ-21 Ethernet/Fast Ethernet Switching Module	S
WS-X6548-RJ-45	48 port 10/100TX RJ-45 Ethernet/Fast Ethernet Switching Module	S
WS-X6582-2PA	Enhanced FlexWAN Module;	S
WS-X6700-CFC	Centralized Forwarding Card	S
WS-X6704-10GE	4-port 10-Gigabit Ethernet	S
WS-X6724-SFP	24-port Gigabit Ethernet SFP	S
WS-X6748-GE-TX	48 port 10/100/1000 RJ-45 Ethernet Switching Module	S

Table 127 Supported Modules for Cisco Catalyst 6500 Series (IOS) Switches (continued)

Module Name	Module Description	Certification Level
WS-X6748-SFP	48-port Gigabit Ethernet SFP	S
WS-X6816-GBIC	16-port Gigabit Ethernet GBIC	S
WS-X6K-S1A-MSFC2	Catalyst 6000 Supervisor Engine 1A, 2 Gigabit Ethernet, plus MSFC2 and policy feature card (PFC)	S
WS-X6K-SUP2-2GE	Supervisor 2 with 2 Gigabit Ethernet ports	S
XENPAK-10GB-ER	10GBASE-ER Serial 1550-nm extended-reach, single-mode fiber (SMF), dispersion-shifted fiber (DSF)	S
XENPAK-10GB-SR	10GBASE-SR Serial 850-nm short-reach multimode fiber (MMF)	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco Catalyst 6500 Series (IOS)—Supported Technologies, page 173.

Cisco Catalyst 6500 Series (IOS)—Supported Technologies

The following technologies are supported by the Cisco Catalyst 6500 Series (IOS) in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Routing Protocols, page 186
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- ATM, page 189
- MPLS, page 191
- VPN, page 193
- ACL, page 194
- Q-in-Q (Switch Port), page 195
- Q-in-Q (Routed Switch), page 195
- STP, page 196

Cisco Catalyst 6500 Series (IOS)—Supported Events

Table 128 lists the supported service events for Cisco Catalyst 6500 Series (IOS) switches in Cisco ANA 3.6 SP1.

Table 128 Service Events for Cisco Catalyst 6500 Series (IOS) Switches

Event Name	Expedited
Primary HSRP interface inactive/ active	N
Secondary HSRP interface inactive/active	N
All ip interfaces down active ip interfaces found	Y
interface status down/up	Y
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
VPN leak	N
Cloud Problem	N
Broken LSP discovered	N
MPLS Black hole	N
Layer 2 Tunnel Down	N
MPLS TE Tunnel Down/Flapping	N
BGP Neighbor Down	N
Card up/down	Y

Cisco Catalyst 6500 Series (CatOS) Switches

This section includes the following information about Cisco Catalyst 6500 Series (CatOS) switches:

- Cisco Catalyst 6500 Series (CatOS)—Supported Software Versions, page 175
- Cisco Catalyst 6500 Series (CatOS)—Supported Topologies, page 175
- Cisco Catalyst 6500 Series (CatOS)—Supported Modules, page 176
- Cisco Catalyst 6500 Series (CatOS)—Supported Technologies, page 179
- Cisco Catalyst 6500 Series (CatOS)—Supported Service Events, page 179

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco Catalyst 6500 Series (CatOS)—Supported Software Versions

Table 129 lists the supported software versions for Cisco Catalyst 6500 Series (CatOS) switches in Cisco ANA 3.6 SP1.

Table 129 Supported Software Versions for Cisco Catalyst 6500 Series (CatOS) Switches

Software Version	Certification Level
CatOS 6.4(10)	V
CatOS 7.6(1)	V

Cisco Catalyst 6500 Series (CatOS)—Supported Topologies

The following topologies are supported for Cisco Catalyst 6500 Series (CatOS) switches in Cisco ANA 3.6 SP1:

- IP
- MAC
- CDP

Cisco Catalyst 6500 Series (CatOS)—Supported Modules

Table 130 lists the supported modules for Cisco Catalyst 6500 Series (CatOS) switches in Cisco ANA 3.6 SP1.

Table 130 Supported Modules for Cisco Catalyst 6500 Series (CatOS) Switches

Module Name	Module Description	Certification Level
AIP	ATM Interface Processor	V
CAT6509	Catalyst 6500 Plus with 9 slots	V
CAT6K-MSFC	Multilevel Switching Feature Card for the Catalyst 6000 series	V
CAT6K-MSFC2	Multilevel Switching Feature Card Version 2 for the Catalyst 6000 series	V
CAT6K-WSF-6700-CFC	Catalyst 6500 centralized Forwarding Card	V
CAT6K-WSF-6K-DFC3A	Catalyst 6500 Distributed L3 switching engine IIIa	V
CAT6K-WSF-6K-PFC3A	Catalyst 6500 Centralized L3 switching engine IIIa	V
CAT6K-WSF-6K-VPWR-GE	Cat6k voice daughter cards	V
CAT6K-WS-SUP32-GE-3B	cat6k-ws-sup32-ge-3b	V
CAT6K-WS-SUP720	Catalyst 6500 Supervisor Module 720 CPU board	V
CAT6K-WS-SUP720-BASE	Catalyst 6500 Supervisor Module 720 base board	V
CAT6K-WS-SVC-IDSM2	Catalyst 6500 Intrusion Detection Module	V
CAT6K-WSX-6066-SLB-APC	Content Switching Module	V
CAT6K-WSX-6148-GE-TX	48-port-10-100-1000-MB-EtherModule	V
CAT6K-WSX-6148-RJ45	48 port10/100BaseTX(RJ-45) module	V
CAT6K-WSX-6248A-RJ45	Catalyst 6000 48-port 10/100BaseTX RJ-45	V
CAT6K-WSX-6248-RJ45	Catalyst 6000 Family 48-port 10/100 RJ-45 module	V
CAT6K-WSX-6348-RJ45	48-port 10/100 ethernet module	V
CAT6K-WSX-6416-GBIC	16-port GBIC Gigabit ethernet module	V
CAT6K-WSX-6515-GETX	Catalyst 6500 16 port 10/100/1000BaseT (RJ-45) module	V
CAT6K-WSX-6516A-GBIC	Catalyst 6500 16 port 1000BaseX (GBIC)	V
CAT6K-WSX-6516-GBIC	Catalyst 6500 16 port 1000BaseX GBIC	V
CAT6K-WSX-6524-MMMT	Catalyst 6500 24 port 100BaseX MM (MT-RJ) module	V
CAT6K-WSX-6548-GETX	Catalyst 6500 48 port 10/100/1000 (RJ-45)	V
CAT6K-WSX-6548-RJ21	Catalyst 6500 48 port 10/100BaseTX =RJ-21=	V

Table 130 Supported Modules for Cisco Catalyst 6500 Series (CatOS) Switches (continued)

Module Name	Module Description	Certification Level
CAT6K-WSX-6548-RJ45	48 port 10/100 Hydra2+/Hydra2V+	V
CAT6K-WSX-6704-10GE	Catalyst 6500 4 port 10 GE	V
CAT6K-WSX-6724-SFP	Catalyst 6500 24 port 1000Base FX (SFP GBIC)	V
CAT6K-WSX-6748-GETX	Catalyst 6500 48 port 10/100/1000 (RJ-45)	V
CAT6K-WSX-SUP1A-2GE	Catalyst 6500 2 port 1000BaseX Supervisor module (GBIC)	V
CAT6K-WSX-SUP2-2GE	Supervisor 2 with 2 Gigabit Ethernet ports	V
CATALYST 6500 FIREWALL MODULE	Catalyst 6500 Firewall Module	V
CEF720 48 PORT 1000MB SFP	Catalyst 6500 48 port 1000Base FX (SFP GBIC)	V
CISCO ME 6524 ETHERNET SWITCH	Cisco ME 6524 Ethernet Switch	V
FSIP	Fast Serial Interface processor	V
GSR-ALARM16	gsr-alarm16	V
HDV	High Density Voice module	V
MIP	MultiChanel Interface Processor	V
MSFC2A ROUTE ENGINE	MSFC2A Route Engine	V
OC192-POS-RPR1-SM-VSR-SPA	1 port OC-192c/STM-64 POS/RPR single mode very short reach Shared Port Adapter =SPA=	V
PA-1T3-PLUS	pa-1t3-plus	V
PA-2FEISL-TX	pa-2feisl-tx	V
PA-2T3-PLUS	pa-2t3-plus	V
PA-8CE1	pa-8ce1	V
PA-A4T	pa-a4t	V
PA-A8T-V35	pa-a8t-v35	V
PA-AH1T	pa-ah1t	V
PA-AH2T	pa-ah2t	V
PA-ATMDX-DS3	pa-atmdx-ds3	V
PA-ATMDX-E3	pa-atmdx-e3	V
PA-ATMDX-MM-OC3	pa-atmdx-mm-oc3	V
PA-ATMDX-SMI-OC3	pa-atmdx-smi-oc3	V
PA-ATMDX-SML-OC3	pa-atmdx-sml-oc3	V
PA-CE3	pa-ce3	V
PA-POSSW-LR	pa-possw-lr	V
PA-POSSW-MM	pa-possw-mm	V
PA-POSSW-SM	pa-possw-sm	V

Table 130 Supported Modules for Cisco Catalyst 6500 Series (CatOS) Switches (continued)

Module Name	Module Description	Certification Level
PM-1FE-1T1	pm-1fe-1t1	V
POLICY FEATURE CARD 3	Policy Feature Card 3	V
POS-OC12-MM	pos-oc12-mm	V
RP	ROMmon Recovery Procedure	V
SPA-10X1GE	10-port Gigabit Ethernet SPA, SFP Optics	S
SPA-1XTENGE-XFP	1-port 10 Gigabit Ethernet SPA, LANPHY XFP Optics	S
SPA-2XOC3-ATM	2-port OC-3c/STM-1c ATM SPA	S
SPA-2XOC48POS/RPR	1-port 10 Gigabit Ethernet Shared Port Adapter XFP based	S
SPA-4XOC3-ATM	4-port OC-3c/STM-1c ATM SPA	S
TRIP	trip	V
VPN MODULE	VPN Module	V
VPN MODULE SUPPORTING 3DES	VPN Module supporting 3DES	V
WS-C6500-SFM	Switch Fabric Module	V
WS-C6509-NEB-A	Enhanced 9-slot vertically oriented chassis	S
WS-F6K-PWR(INLINE POWER CARD)	CATALYST 6000 INLINE POWER CARD, REF	V
WS-SUP720-3BXL	Catalyst 6500/Cisco 7600 Supervisor 720 Fabric MSFC3 PFC3BXL	V
WS-SVC-ADM-1-K9=	Catalyst 6500 Cisco Anomaly Detection Module	V
WS-SVC-AGM-1-K9=	Catalyst 6500 Cisco Anomaly Guard Module	V
WS-SVC-IDS2-BUN-K9	Cisco Catalyst 6500 Series Intrusion Detection System (IDSM-2) Service Module	S
WS-SVC-SSL-1-K9=	SSL Module for Catalyst 6500	V
WS-X6148-FE-SFP	Cisco Catalyst 6500 48-port 100BASE-X SFP Module	V
WSX-6408A-GBIC	Catalyst 6000 8-port Gigabit Ethernet Module	V
WSX-6408-GBIC	Card with 8 Gigabit Ethernet ports for the Catalyst 6000 series	V
WS-X6500-SFM2	Switch Fabric Module 2	V
WVIC-2DSU-T1(V2)	wvic-2dsu-t1(V2)	V

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco Catalyst 6500 Series (CatOS)—Supported Technologies, page 179.

Cisco Catalyst 6500 Series (CatOS)—Supported Technologies

The following technologies are supported by the Cisco Catalyst 6500 Series (CatOS) in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- HDLC, page 190
- Q-in-Q (Switch Port), page 195
- Q-in-Q (Routed Switch), page 195
- STP, page 196

Cisco Catalyst 6500 Series (CatOS)—Supported Service Events

Table 131 lists the supported service events for Cisco Catalyst 6500 Series (CatOS) switches in Cisco ANA 3.6 SP1.

Table 131 Service Events for Cisco Catalyst 6500 Series (CatOS) Switches

Event Name	Expedited
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Cloud Problem	N
Card up/down	Y

Cisco ME 6500 Series Ethernet Switches

This section includes the following information about Cisco ME 6500 Series switches:

- Cisco ME 6500 Series—Supported Software Versions, page 180
- Cisco ME 6500 Series—Supported Topologies, page 180
- Cisco ME 6500 Series—Supported Modules, page 181
- Cisco ME 6500 Series—Supported Technologies, page 181
- Cisco ME 6500 Series—Supported Events, page 181

Note For information about which NE types are supported in Cisco ANA 3.6 SP1, see Supported Cisco Switches in Cisco ANA 3.6 SP1.

Cisco ME 6500 Series—Supported Software Versions

Table 132 lists the supported software versions for Cisco ME 6500 Series switches in Cisco ANA 3.6 SP1.

Table 132 Supported Software Versions for Cisco ME 6500 Series Switches

Software Version	Certification Level
12.2(18)ZU	S
12.2(18)ZU1	S
12.2(18)ZU2	S
12.2*	S

Note Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6 SP1. Specific software versions that have been tested and verified are listed individually and marked as V.

Cisco ME 6500 Series—Supported Topologies

The following topologies are supported for Cisco ME 6500 Series switches in Cisco ANA 3.6 SP1:

- MAC
- CDP
- MPLS

Cisco ME 6500 Series—Supported Modules

Table 133 lists the supported modules for Cisco ME 6500 Series switches in Cisco ANA 3.6 SP1.

Table 133 Supported Modules for Cisco ME 6500 Series Switches

Module Name	Module Description	Certification Level
ME-C6524GS-8S	24 Gigabit Ethernet SFP interfaces + 8 Gigabit Ethernet SFP uplinks, 1 fan tray	S

Note For detailed information about the specific technologies and attributes supported by this NE, see Cisco ME 6500 Series—Supported Technologies, page 181.

Cisco ME 6500 Series—Supported Technologies

The following technologies are supported by the Cisco ME 6500 Series in Cisco ANA 3.6 SP1:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185
- Routing Protocols, page 186
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- MPLS, page 191
- VPN, page 193
- Q-in-Q (Switch Port), page 195
- STP, page 196

Cisco ME 6500 Series—Supported Events

Table 134 lists the supported service events for Cisco ME 6500 Series switches in Cisco ANA 3.6 SP1.

Table 134 Service Events for Cisco ME 6500 Series Switches

Event Name	Expedited
Primary HSRP interface is not active Primary HSRP interface is active	N
Secondary HSRP interface is active Secondary HSRP interface is not active	N

Table 134 Service Events for Cisco ME 6500 Series Switches (continued)

Event Name	Expedited
All ip interfaces down active ip interfaces found	Y
interface status down/up	Y
card in/out	Y
link down/up	Y
Device Unreachable	N
CPU Over Utilized	N
Memory Over utilize	N
Device Unsupported	N
Discard Packets	N
Dropped Packets	N
Module Unsupported	N
Port Flapping	N
Port Down	Y
Rx Over utilized	N
Tx Over utilized	N
VPN leak	N
Cloud Problem	N
Broken LSP discovered	N
MPLS Black hole	N
Layer 2 Tunnel Down	N
MPLS TE Tunnel Down/Flapping	N
BGP Neighbor Down	N
Card up/down	Y

Supported Technologies on Cisco Switches

The following sections list the objects and attributes that are supported on Cisco switches in Cisco ANA 3.6 SP1 per technology:

- Base Logical Components, page 183
- Layer 1, page 184
- IP, page 185

- Routing Protocols, page 186
- Ethernet (Physical), page 187
- Physical Equipment, page 187
- Ethernet (Logical), page 188
- ATM, page 189
- HDLC, page 190
- MPLS, page 191
- VPN, page 193
- ACL, page 194
- Q-in-Q (Switch Port), page 195
- Q-in-Q (Routed Switch), page 195
- STP, page 196

Note For more information about the objects and attributes described in this chapter, see *Cisco Active Network Abstraction Technology Support and Information Model Reference Manual, Version 3.6, Service Pack 1.*

Base Logical Components

Table 135 summarizes base logical component support on Cisco switches in Cisco ANA 3.6 SP1.

Table 135 Base Logical Component Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Managed Element Object (IMO Name—IManagedElement)													
IP Address	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Communication State	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Investigation State	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Element Category	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Element Type and Key	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Device Name	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
System Name	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
System Description	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Up Time	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Software Version	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Vendor Identity	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
Memory and CPU Usage	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Agent Memory	Y	Y	Y		Y	Y	Y		Y	Y	Y	Y	

Table 135 Base Logical Component Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Number of Device Components													
Number of Logical Entries													

Layer 1

Table 136 summarizes Layer 1 attribute support on Cisco switches in Cisco ANA 3.6 SP1.

Table 136 Layer 1 Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Physical Layer Object (IMO Name—IPhysicalLayer)													
Media Type	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y	Y
Clocking Source											Y		Y
Maximum Speed	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Is Internal Port	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	
Maximum and Minimum Discarded Thresholds	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	
Discarded Bandwidth													
Maximum and Minimum Dropped Thresholds	Y							Y		Y	Y	Y	
Dropped Bandwidth													
Maximum and Minimum Input Threshold	Y							Y		Y	Y	Y	
Input Bandwidth													
Maximum and Minimum Output Thresholds	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	
Output Bandwidth													
Discarded and Received Input Data Counters	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
Dropped and Forward Output Data Counters	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
Administrative Status	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Operational Status	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Last Changed	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
IANA Type	Y		Y		Y	Y	Y		Y		Y	Y	Y

IP

Table 137 summarizes IP attribute support on Cisco switches in Cisco ANA 3.6 SP1.

Table 137 IP Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
IP Interface Object (IMO Name—IIPInterface)													
IP Address	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Subnetwork Mask	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
IP Interface Addresses	Y										Y	Y	Y
Interface Name	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Interface Description								Y			Y		Y
IP Interface State	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
OSPF Interface Cost											Y		
Broadcast Address								Y			Y		
MTU											Y		Y
Lookup Method													
Address Resolution Type													
ARP Timeout													
Secured ARP													
ICMP Mask Reply													
IGMP Proxy													
HSRP Groups											Y		
IP Multiplexing Table													
IANA Type								Y					
Routing Entry Object (IMO Name—IRoutingEntry)													
Destination IP Subnet	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Next Hop IP Address	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Type	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Routing Protocol Type	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Outgoing Interface Name	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y	Y
ARP Entry Object (IMO Name—IARPEntry)													
IP Address	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
MAC Address	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Port	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
Entry Type								Y			Y		Y
HSRP Group Entry Object (IMO Name—HSRPGroupEntry)													

Table 137 IP Attribute Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Group Number											Y		Y
Port Description											Y		
Priority											Y		Y
Coupled Router											Y		Y
State											Y		Y
Tracking Interfaces													
Virtual IP Address											Y		Y
Virtual MAC Address											Y		Y

Routing Protocols

Table 138 summarizes routing protocol attribute support on Cisco switches in Cisco ANA 3.6 SP1.

Table 138 Routing Protocol Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
BGP Neighbor Entry Object (IMO Name—IBgpNeighborEntry)													
Remote Identifier							Y				Y		Y
Neighbor Type							Y						
Distributing Interfaces							Y						
Remote Address							Y				Y		Y
Remote Autonomous System							Y				Y		Y
Status							Y				Y		Y
Hold Time							Y				Y		Y
Keep Alive Time							Y				Y		Y
OSPF Entry Object (IMO Name—IOspfEntry)													
Area Identifier											Y		Y
IP Address											Y		Y
Type											Y		Y
Administrative Status											Y		Y
Operational Status											Y		Y

Ethernet (Physical)

Table 139 summarizes support for physical Ethernet attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 139 Ethernet Physical Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Ethernet Channel Object (IMO Name—IEthernetChannel)													
Channel Group	Y	Y	Y		Y	Y	Y	Y	Y		Y	Y	Y
Channel Bandwidth	Y	Y										Y	
IANA Type	Y		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
Ethernet Interface Object (IMO Name—IEthernet)													
MAC Address	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Duplex Mode													
Output Flow Control													
Input Flow Control													
IANA Type				Y									

Physical Equipment

Table 140 summarizes physical equipment support on Cisco switches in Cisco ANA 3.6 SP1.

Table 140 Physical Equipment Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Module/Board Object (IMO Name—Imodule)													
Module Name	Y	Y	Y		Y	Y	Y		Y		Y	Y	Y
Module Description		Y	Y		Y	Y	Y		Y	Y	Y	Y	Y
Software Version	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Operational Status	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hardware Type & Version	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Managed IP Address													
Redundant Equipment													
Configured Redundancy													
Redundancy Status			Y		Y	Y	Y		Y		Y		
Operational Status Last Changed		Y	Y	Y	Y	Y	Y	Y	Y		Y		Y

Table 140 Physical Equipment Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Supported Physical Termination Points		Y							Y		Y		Y
Serial Number (soft property)	Y	Y		Y	Y	Y	Y	Y	Y		Y	Y	Y
Chassis Object (IMO Name—Ichassis)													
Equipment Holder Type		Y	Y		Y	Y	Y		Y		Y		Y
Description			Y		Y	Y	Y	Y	Y			Y	
Serial Number	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y

Ethernet (Logical)

Table 141 summarizes support for logical Ethernet attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 141 Ethernet Logical Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
VLAN Encapsulation Object (IMO Name—IIEEE802)													
VLAN Identification		Y	Y	Y	Y	Y	Y		Y		Y	Y	Y
Binding Information													
Binding Status													
IANA Type			Y		Y	Y	Y		Y		Y	Y	
Bridging Entry Object (IMO Name—IBridgeEntry)													
Destination MAC Address	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
Outgoing Interface		Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y

ATM

Table 142 summarizes support for Asynchronous Transfer Mode (ATM) attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 142 ATM Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
ATM Interface Object (IMO Name—IAtm)													
ATM Address													
Interface Type													
VP and VC Ranges													
VC Table											Y		
Cross-Connect Table													
IANA Type											Y		
ATM VC Object (IMO Name—IAtmVc)													
Virtual Channel Identifier											Y		
Virtual Path Identifier											Y		
Shaping Profile													
Discarded and Received Input Data Counters											Y		
Dropped and Forward Output Data Counters											Y		
Ingress Traffic Descriptor											Y		
Egress Traffic Descriptor											Y		
Administrative Status											Y		
Operational Status											Y		
IANA Type													
Virtual Connection Encapsulation Object (IMO Name—IVcBasedEncapsulation)													
Virtual Connection Interface													
Binding Information													
Binding Status											Y		
IANA Type											Y		
ATM Traffic Descriptor Object (IMO Name—IAtmTrafficDescriptor)													
Traffic Descriptor Type											Y		
Service Category											Y		
Cell Loss Priority											Y		
Cell Delay Variation													
Cell Delay Variation Tolerance											Y		

Table 142 ATM Attribute Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Maximum High Priority and Aggregate Burst Rates											Y		
Minimum High Priority and Aggregate Cell Rates											Y		
Sustainable High Priority and Aggregate Cell Rates											Y		
Peak High Priority and Aggregate Cell Rates											Y		
Name													
Index													
ATM Access Traffic Descriptor Object (IMO Name—IAtmAccessTrafficDescriptor)													
Scope													
Maximum Active VPCs and VCCs													
Maximum Supported VPI and VCI Bits													
Generic Flow Control Mode													
Police Mode													
Name													
Index													
ATM Logical Interface Object (IMO Name—IAtmLogicalPort/Trunk)													
Same as ATM interface													

HDLC

Table 143 summarizes support for High-Level Data Link Control (HDLC) attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 143 HDLC Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
High Level Data Link Control Encapsulation Object (IMO Name—IEncapsulation)													
Virtual Connection Interface												Y	
Binding Information													

Table 143 HDLC Attribute Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Binding Status												Y	
IANA Type												Y	

MPLS

Table 144 summarizes support for Multiprotocol Label Switching (MPLS) attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 144 MPLS Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
MPLS Interface Object (IMO Name—IMpls)													
Distribution Protocol							Y				Y		Y
Outer and Inner Labels													Y
Traffic Engineering Properties							Y				Y		Y
Resource Reservation Properties													
IANA Type											Y		
MPLS TE Tunnel Interface Object (IMO Name—IMplsTETunnel)													
Destination Address							Y				Y		Y
Outgoing Interface and Label							Y				Y		Y
Path Identification							Y				Y		Y
Requested Bandwidth							Y				Y		Y
Measured Average Burst and Peak Bandwidth							Y				Y		Y
Setup and Hold Priority							Y				Y		Y
Affinity Bits and Mask							Y				Y		Y
Automatic Route Announcement Status							Y				Y		Y
Optimization Lock Down Status							Y				Y		Y
Path Option							Y				Y		Y
Name							Y				Y		Y
Description							Y				Y		Y
Administrative Status							Y				Y		Y
Operational Status							Y				Y		Y

Table 144 MPLS Attribute Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
IANA Type							Y				Y		
Point-to-Point Layer 2 MPLS Tunnel Interface Object (IMO Name—IPTPLayer2MplsTunnel)													
Local and Remote Router Addresses							Y				Y		Y
Local and Remote Virtual Connection Labels							Y				Y		Y
Tunnel Identification							Y				Y		Y
Tunnel Status							Y				Y		Y
Local and Remote Tunnel Interface													
IANA Type							Y				Y		
MPLS TE Object (IMO Name—IMplsTEProperties)													
Administrative Weight							Y				Y		Y
Attributes Identifier													
Signaling Protocol							Y				Y		Y
Available Physical and Reservable Bandwidth							Y				Y		Y
Reserved Bandwidth							Y				Y		Y
MPLS TE Allocation Entry Object (IMO Name—IMplsTEPropertiesAllocationEntry)													
Priority Level							Y						
Allocated and Cumulative Bandwidth							Y						
RSVP Properties Object (IMO Name—IRsvpProperties)													
Allocated Bandwidth													
Maximum Per Flow and Total Allowed Bandwidth													
LSE Entry Object (IMO Name—ILSEEntry)													
Incoming Label							Y				Y		Y
Outgoing Interface and Label							Y				Y		Y
Switching Action							Y				Y		Y
Next Hop IP Address							Y				Y		Y
MPLS Aggregate Entry Object (IMO Name—IMplsAggregateEntry)													
Virtual Routing Entity							Y				Y		Y
Incoming Label							Y				Y		Y
Outgoing Interface and Label							Y				Y		Y
Switching Action							Y				Y		Y

Table 144 MPLS Attribute Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Next Hop IP Address							Y				Y		Y
MPLS TE Tunnel Segment Object (IMO Name—IMplsTESegment)													
Segment Type							Y				Y		Y
Measured Average Burst and Peak Bandwidth							Y				Y		Y
Path Identification							Y				Y		Y
Name							Y				Y		Y

VPN

Table 145 summarizes support for virtual private network (VPN) attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 145 VPN Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
VRF Entity Object (IMO Name—IVrf)													
Name											Y		Y
Route Distinguisher											Y		Y
Virtual Routing Entry Object (IMO Name—IVrfEntry)													
Next Hop BGP Address											Y		Y
Incoming and Outgoing Inner Label											Y		Y
Outer Label											Y		Y
Destination IP Subnet											Y		Y
Next Hop IP Address											Y		Y
Type											Y		Y
Routing Protocol Type											Y		Y
Outgoing Interface Name											Y		Y
Multi-Protocol BGP Entity Object (IMO Name—IMpBgp)													
BGP Identifier							Y				Y		Y
Local Autonomous System							Y				Y		Y
Cross Virtual Routing Object (IMO Name—ICrossVrfRoutingEntry)													

Table 145 VPN Attribute Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Outgoing Virtual Routing Entity Identifier													
Incoming and Outgoing Virtual Routing Tags													Y
Destination IP Subnet											Y		Y
Next Hop IP Address											Y		Y
Type											Y		Y
Routing Protocol Type											Y		Y
Outgoing Interface Name													

ACL

Table 146 summarizes support for access list (ACL) attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 146 ACL Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Access List Entry Object (IMO Name—IAccessListEntry)													
Entry Identification											Y		
Action Logic											Y		
Source and Destination Address											Y		
Source and Destination Wildcard											Y		
Protocol Type											Y		
Source and Destination Port Ranges											Y		
Source and Destination Port Action											Y		
Protocol Specific Info											Y		
Differential Services Code Points											Y		
Type of Service											Y		
Precedence											Y		
Matches											Y		

Q-in-Q (Switch Port)

Table 147 summarizes support for Q-in-Q (also known as stacked VLAN) switch port attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 147 Q-in-Q Switch Port Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
VLAN Interface Object (IMO Name—IVlanInterface)													
Mode		Y		Y	Y	Y	Y			Y	Y	Y	Y
Native Identification		Y		Y	Y	Y	Y			Y	Y	Y	Y
Customer Edge Identification													
Service Provider Identification													
VLAN Table													
IANA Type												Y	
VLAN Entry Object (IMO Name—IVlanEntry)													
Identification					Y	Y	Y				Y	Y	
Encapsulation Type					Y	Y	Y				Y	Y	

Q-in-Q (Routed Switch)

Table 148 summarizes support for Q-in-Q (also known as stacked VLAN) routed switch attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 148 Q-in-Q Routed Switch Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
VLAN Multiplexer Object (IMO Name—IVlanEncapMux)													
IANA Type					Y	Y	Y				Y	Y	
VLAN Encapsulation Object (IMO Name—IEEE802)													
VLAN Identification													
Binding Information													
Binding Status													
IANA Type					Y	Y	Y				Y	Y	

STP

Table 149 summarizes support for Spanning Tree Protocol (STP) attributes on Cisco switches in Cisco ANA 3.6 SP1.

Table 149 STP Attribute Support on Cisco Switches

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
STP Service Object (IMO Name—IStpService)													
Protocol Type	Y			Y						Y		Y	
Current and Bridge	Y			Y	Y		Y	Y	Y	Y	Y	Y	
Current and Bridge Hello Time	Y			Y	Y		Y	Y	Y	Y	Y	Y	
Current and Bridge Forward Delay	Y			Y	Y		Y	Y	Y	Y	Y	Y	
Bridge Information Table	Y			Y	Y		Y	Y	Y		Y	Y	
MST Service Object (IMO Name—IMstService)													
Protocol Properties				Y					Y			Y	
Same as IStpService				Y					Y			Y	
MST Properties Object (IMO Name—ImstProperties)													
Force Version	Y			Y	Y		Y	Y	Y	Y	Y	Y	
Configuration Format, Region Name and Revision Level	Y			Y	Y		Y	Y	Y	Y	Y	Y	
External Root Cost													
Maximum Instances													
STP Instance Information Object (IMO Name—IStpInstanceInfo)													
Object Identification		Y								Y			Y
Identification													
Priority		Y								Y			Y
Designated Parent and Root Bridges	Y			Y	Y		Y	Y	Y		Y	Y	
Root Cost	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
Is Root	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
Root Port Identification	Y			Y	Y		Y	Y	Y		Y	Y	
Port Information Table	Y	Y		Y				Y	Y	Y		Y	Y
MST Protocol Instance Information Object (IMO Name—IMstInstanceInfo)													
Instance Identification	Y			Y	Y		Y	Y	Y		Y	Y	
same as IStpBridgeInfo	Y			Y	Y		Y	Y	Y		Y	Y	
Per VLAN Spanning Tree Protocol Instance Information Object (IMO Name—IPvstpInstanceInfo)													
Protocol Type	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y

Table 149 STP Attribute Support on Cisco Switches (continued)

Attribute	2900	ME 3400	3500 XL	3550	3560	3750	ME 3750	4000	4500	ME 4900	6500 IOS	6500 CatOS	ME 6524
Current and Bridge Maximum Age	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
Current and Bridge Hello Time	Y			Y	Y		Y	Y	Y		Y	Y	
Current and Bridge Forward Delay	Y			Y	Y		Y	Y	Y		Y	Y	
same as IStpInstanceInfo	Y			Y			Y		Y		Y	Y	
RSTP Instance Information Object (IRstpInstanceInfo)													
Force Version	Y			Y	Y		Y	Y	Y		Y	Y	
same as IStpInstanceInfo				Y			Y		Y		Y		